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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/378,669	08/20/1999	SHU LIN	RCA.89417	9410

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EXAMINER

CHIEU, PO LIN

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/378,669

Applicant(s)

LIN ET AL.

Examiner

Polin Chieu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-12 and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al (6,385,389) in view of Na et al (6,504,996).

Regarding claim 1, Maruyama et al discloses parsing encoded packetized data representative of a sequence of individual images to determine parameters to support navigation through the sequence of individual images (fig. 3); formatting the determined parameters into a predetermined data structure (fig. 25-34); and incorporating the determined parameters in the predetermined data structure into a pre-formed navigation data field (fig. 12 or VMG in fig. 8). However, Maruyama et al does not disclose

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providing the encoded packetized data and the pre-formed navigation data field as an output in the second data format, wherein, the data format conversion converts at least one of, (a) volume structure, (b) file structure, and (c) navigation data, compliant with the first data format into at least one of, (a) a different volume structure, (b) different file structure, and (c) different navigation data comprising the navigation data field, compliant with the second data format.

Na et al teaches a DVD player through a digital interface (i.e. IEEE 1394) to a digital TV (fig. 4). The device converts a program stream (PS) into a transport stream (TS) to transmit the data in the proper format needed by the digital TV. The conversion of a PS into a TS converts navigation data into a different navigation data (i.e. PAT, PMT, etc., col. 3, line 14 – col. 6, line 21). Additionally, the file structure (packets) and volume (entire stream) structure are considered to be altered because the structure of the packets and entire stream is altered to accommodate the new data (col. 3, line 14 – col. 6, line 21). Note: the term “at least one of...” in the claim only requires one of the limitations in a list to be met.

It would have been highly desirable to have the program stream converted to a transport stream so that data can be transmit through a digital interface (i.e. IEEE 1394), thereby overcoming the problems of a analog interface (col. 2, line 40 – col. 3, line 15).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to convert a PS to a TS in the device of Maruyama et al.

Regarding claim 2, the term "at least one of..." in the claim only requires one of the limitations to be met. Maruyama et al discloses data identifying reference frames in a VOB or GOP; a start address of image representative data; and an end address of image representative data (col. 37, line 60-65).

Regarding claim 3 Maruyama et al discloses that the determined parameters in the navigation data field support navigation of a group of pictures (GOP); a video object unit (VOB); a program; a different program; and video data of different MPEG compatible elementary streams (DA21242, fig. 3).

Regarding claim 4, Maruyama et al disclose that the different programs comprise a video program (video pack) and an associated program comprising audio data (audio pack); and text data (sub-picture pack) in figure 27.

Regarding claim 5, Maruyama et al discloses that the different programs comprise two different video programs (1407 and 1408, fig. 27).

Regarding claim 6, Maruyama et al discloses incorporating the determined parameters into a previously black area of the pre-formed navigation data field (col. 12, lines 50-57).

Regarding claim 7, Maruyama et al discloses "Pack Headers" in figure 12 for video, sub-picture, audio, dummy, and navigation data. The pack header indicates the type of data in the pack; therefore, the pack header is an indicator in a datastream including the encoded packetized data and the navigation data field to indicate if the determined parameters are incorporated in the navigation data field. For example, if the

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pack header indicates navigation data the parameters are incorporated, and if the pack header indicates a dummy pack then the parameters have not been incorporated.

Regarding claim 8, Maruyama et al discloses that the pre-formed data navigation data field comprises a header and a payload and the determined parameters are incorporated in the navigation data field payload (fig. 12).

Regarding claim 9, Maruyama et al discloses that the pre-formed navigation data field accommodates subsequent insertion of the determined parameters (col. 14, lines 46-56).

Regarding claim 10, Maruyama et al discloses recording on a DVD-R or DVD-RAM using video and audio from an AV input (42) in figure 19. Therefore, the encoded packetized data is stored and the parsing occurs in response to initiation of a data format conversion operation (i.e. a recording operation).

Regarding claims 11 and 14, Maruyama et al discloses generating navigation parameters (56) to support navigation through a sequence of individual images by parsing encoded packetized data representative of a sequence of individual images (fig. 3) in the first data format (42) in figure 19; incorporating the navigation parameters into a navigation data field (fig. 12 or VMG in fig. 8); and providing an output comprising packetized data representative of a sequence of individual images in the different second format including the navigation data field (fig. 25 to 34). The AV input is considered to be a first format because the AV input can be from a VCR or the like in which the format is different from the format shown in figures 25-34. However, Maruyama et al does not disclose that the navigation parameters are derived from at

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least one of: navigational information related to the sequence of individual images and file structure information; and that the output second data format includes the navigation data field in a different data format and a different file structure.

As discussed in the art rejection of claim 1, Na et al teaches converting a PS into a TS, which includes deriving navigation parameters from at least one of navigational information (NAV PACK) related to the sequence of individual images and file structure information (col. 5, line 14 – col. 6, line 21), wherein the second data format includes the navigation data field in a different data format and a different file structure (please see the art rejection of claim 1).

It would have been highly desirable to have the program stream converted to a transport stream so that data can be transmit through a digital interface (i.e. IEEE 1394), thereby overcoming the problems of a analog interface (col. 2, line 40 – col. 3, line 15).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to convert a PS to a TS in the device of Maruyama et al.

Regarding claim 12, Maruyama et al discloses re-formatting an existing navigation data field with the navigation parameters (col. 14, lines 46-56).

The limitations of claim 15 where discussed in the art rejection of claim 2. Please refer to the art rejection of claim 2.

The limitations of claim 16 where discussed in the art rejection of claim 3. Please refer to the art rejection of claim 3.

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The limitations of claim 17 where discussed in the art rejection of claim 4. Please refer to the art rejection of claim 4.

The limitations of claim 18 where discussed in the art rejection of claim 5. Please refer to the art rejection of claim 5.

The limitations of claim 19 where discussed in the art rejection of claim 7. Please refer to the art rejection of claim 7.

The limitations of claim 20 where discussed in the art rejection of claim 8. Please refer to the art rejection of claim 8.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al in view of Na et al and Yamauchi et al (6,381,398).

Regarding claim 13, Maruyama et al discloses that the second data is a recordable data format (i.e. DVD-R or DVD-RW in figs. 25-34). However, Maruyama et al does not disclose the type of first format used.

Yamauchi et al teaches a disc format conversion device using a first read only data format (13 magneto optical disc) and a second recordable data format (fig. 34).

It would have been highly desirable to conversion from any format to any other format such as from a read only format to a recordable format.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to convert from a read only format to a recordable format in the device of Maruyama et al.

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Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hiroshima et al, Horiguchi et al, and Inoue et al disclose devices that convert formats; and Naimpally and Hiroshima et al additionally disclose transport stream formats.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Polin Chieu whose telephone number is (703) 308-6070. The examiner can normally be reached on M-Th 8:00 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew B. Christensen can be reached on (703) 308-9644. The fax phone

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numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any response to this action should be mailed to:

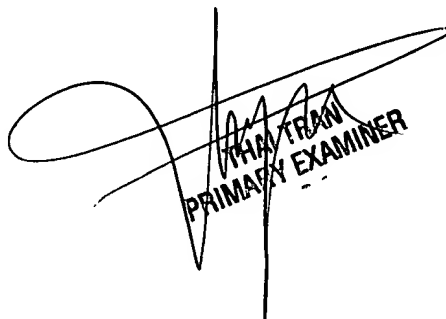
Commissioner of Patents and Trademarks

Washington, D.C. 20231

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

PC
July 28, 2003



TRAN TRAN
PRIMARY EXAMINER